



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,359	06/23/2006	Masaki Inoue	4265-0071WOUS	3372

35301 7590 08/06/2008  
MCCORMICK, PAULDING & HUBER LLP  
CITY PLACE II  
185 ASYLUM STREET  
HARTFORD, CT 06103

EXAMINER
----------

JOHNSON, MATTHEW A

ART UNIT	PAPER NUMBER
----------	--------------

3682

MAIL DATE	DELIVERY MODE
-----------	---------------

08/06/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,359	<b>Applicant(s)</b> INOUE ET AL.	
	<b>Examiner</b> MATTHEW JOHNSON	<b>Art Unit</b> 3682	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Prosecution Application***

The request filed on 7/17/2008 for continued examination (RCE) is accepted and a RCE has been established. An action on the RCE follows.

### ***Claim Objections***

1. Claim 5 is objected to because of the following informalities: in claim 5 line 10, the phrase "which in disposed" should read -- which is disposed --.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, are rejected under 35 U.S.C. 102(b) as being anticipated by Katsumi et al. (JP 09-190225).

Re clm 1: Katsumi discloses a linear actuator comprising:

- A shaft (13) having a male thread portion (12)
- A worm gear speed reducer (7, Fig. 5) for reducing rotation of a motor (6) in speed and transmitting the rotation to the shaft (see English Abstract)

- A female thread member (14) which is threadedly engaged with the male thread portion (Fig. 9) and which moves forward and backward with respect to a housing (10)
- A position detection apparatus (51) which is disposed in parallel to the shaft (Fig. 7) and allows detection of a position of the moving cylinder in the housing to be adjusted (see English Abstract)

Re clm 2: Katsumi further discloses the position detection apparatus comprises a potentiometer (51, 54) which converts the rotation amount of the shaft into a voltage value (Fig. 18), and the position detection apparatus is movably provided on the housing (see English Abstract, Figs. 16 and 17).

Re clm 3: Katsumi further discloses a driven gear (46) is mounted on a sensor shaft (44) of the potentiometer, the driven gear is meshed with a pinion (49) which rotates in unison with the shaft (via 42), and the potentiometer can move in an axial direction of the moving cylinder (English Abstract).

Re clm 4: Katsumi further discloses the potentiometer can slide in the axial direction of the moving cylinder (English Abstract).

Re clm 5: Katsumi discloses a linear actuator comprising:

- A shaft (13) having a male thread portion (12)
- A worm gear speed reducer (7, Fig. 5) for reducing rotation of a motor (6) in speed and transmitting the rotation to the shaft (see English Abstract)

Art Unit: 3682

- A female thread member (14) which is threadedly engaged with the male thread portion (Fig. 9) and which moves forward and backward by normal or reverse rotation of the shaft
- A moving cylinder (15) which is fixed to the female thread member and which moves forward and backward with respect to a housing (10)
- A position detection apparatus (54, 51) which is disposed in parallel to the shaft (Fig. 7) and detects a position of the moving cylinder (see English Abstract)
- Wherein the mounting of the position detection apparatus allows the position of the moving cylinder detected by the position detection apparatus to be adjusted in the housing (English Abstract)

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1- 5 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP-4,931,710 discloses a position detecting apparatus (68) that is movable in an axial direction (collar 78, Fig. 4) of a housing for the purpose of calibrating the sensor during a mounting operation (C3 L26-56). USP-6,078,249 discloses a position detection apparatus (24) that can be automatically

Art Unit: 3682

adjusted upon resetting of the device in order to improve accuracy (C1 L48-55, C4 L45-47).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW JOHNSON whose telephone number is (571)272-7944. The examiner can normally be reached on Monday - Friday 8:30a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J./  
Examiner, Art Unit 3682

Application/Control Number: 10/584,359

Page 6

Art Unit: 3682

/Richard WL Ridley/  
Supervisory Patent Examiner, Art Unit 3682